

28

Date: Tuesday, 6/19/2007 2:03:56 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : AFT X-TUBE EXT HEIGHT GEAR
 Job Number : 32944
 Estimate Number : 10421
 P.O. Number : N/A Part Number : D205596103
 This Issue : 6/19/2007 S.O. No. : N/A Drawing Number : D205-596-103 REV A
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : LANDING GEAR Drawing Revision : A
 Previous Run : 32943 Material : N/A
 Due Date : 7/14/2007 Qty: 1 Um: Each
 Written By :
 Checked & Approved By : 07.06.20
 Comment : Est Rev:G 05.06.10 Acid etch moved to Step 11 KJ/JLM

Additional Product

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|------------------|
| 1.0 | DC | DOCUMENT CONTROL |



Comment: DOCUMENT CONTROL

Photocopy D205-594 bluefile & type labels per PPP D205-596-103CHG001

200828

KS 07-06-21

D2890

Aft Crosstube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D2890 Aft Crosstube B33028

EL 7-8-16

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Mark 37.30" for cutting from tangential line in the straight section from D2890 as per Dwg wall template.

EL 7-8-16

QC15

DIMENSIONAL CHECK OF X-TUBES



Comment: DIMENSIONAL CHECK OF X-TUBES

EP 07/08/16

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Cut as per Dwg D205-596-103

DP 7-8-20

PTO-1

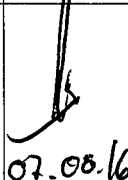

2-Deburr & Inspect for surface damage. Polish cut surface. Scribe part # and batch # on one end of tube.

JD 7-8-24

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes (No) DQA: ED Date: 07/08/16
 QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|----------|------|--|--|---|----------------|---------------------------|--|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| 07/08/16 | #5.0 | tube is over bent at the height of 37.4" |  07.08.16 | Acceptable but must be cut @ a height of 37.4 as per David Shepherd's email | EL 7-8-16 | EP 07/08/16 |  07.08.16 | EP 07/08/16 |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT X-TUBE EXT HEIGHT GEAR

Job Number: 32944

Part Number: D205596103

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC15

DIMENSIONAL CHECK OF X-TUBES



Comment: DIMENSIONAL CHECK OF X-TUBES

En 07/08/24

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

TOUCH UP Chemical Conversion Coat as per QSI 005 4.1

JB 7-f-24

8.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside with Immron per QSI 005 4.2

BT 07-08-26

9.0

QC14

INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

En 07/08/27

10.0

D2856600

Abrasion Strip



Comment: Qty.: 1.7640 f(s)/Unit Total : 1.7640 f(s)

Pick:

Qty Part number

Description

Batch

2 D2856-600(10.090")

Abrasion Strip

26650

BT 07 08 . 27

11.0

D29401

Support



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number

Description

Batch

2 D2940-1

Support

32169

BT 07-08 27

12.0

MS2192028

Clamp(per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number

Description

Batch

4 MS21920-28

Clamp

105385

BT 07 08 27

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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Date: Tuesday, 6/19/2007 2:03:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT X-TUBE EXT HEIGHT GEAR

Job Number: 32944

Part Number: D205596103

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

Install abrasion strips per QSI 035 position using DT8582. Install supports and clamps per Dwg
D205-596-103. Torque clamps to 80-100 in lb.

27-07-08-27

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

En 27/08/07

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D205-596-103

Location: Rev R

27/08/28

16.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

27/08/28

Job Completion



27/08/28

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

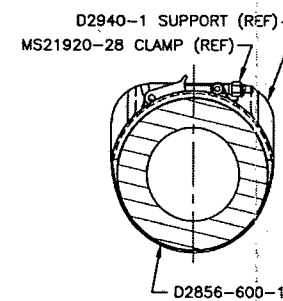
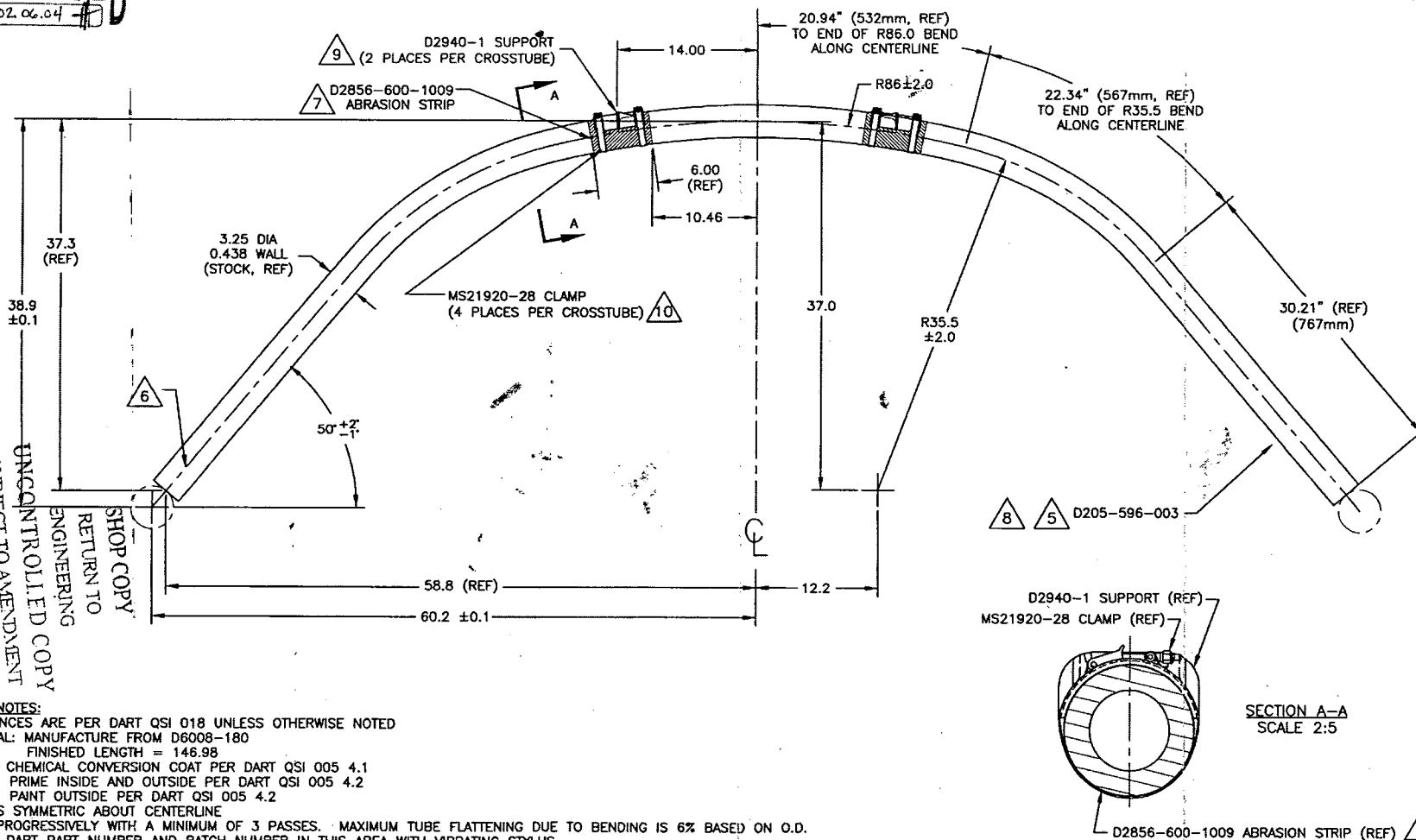
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

RELEASED
02.06.04



SECTION A-A
SCALE 2:5

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) MATERIAL: MANUFACTURE FROM D6008-180
FINISHED LENGTH = 146.98
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) BEND PROGRESSIVELY WITH A MINIMUM OF 3 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 6) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS
- 7) INSTALL D2856-600-1009 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2940-1 SUPPORT, PER QSI 035
- 8) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 9) SEAL EDGES OF SUPPORTS USING SIKAFLEX-241/-291 SEALANT (OPTIONAL)
- 10) TORQUE CLAMPS 80 TO 100 IN-LB

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| | | | | |
|---------|----------|----------|-------------------------|---|
| A | | 02.05.27 | NEW ISSUE | |
| DESIGN | UP | DRAWN BY | UP | DART DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA |
| CHECKED | # | APPROVED | # | DRAWING NO. D205-596-103 |
| DATE | 02.05.27 | TITLE | XTUBE ASS'Y (HI-HI AFT) | |
| | | | | SCALE 1:10 |

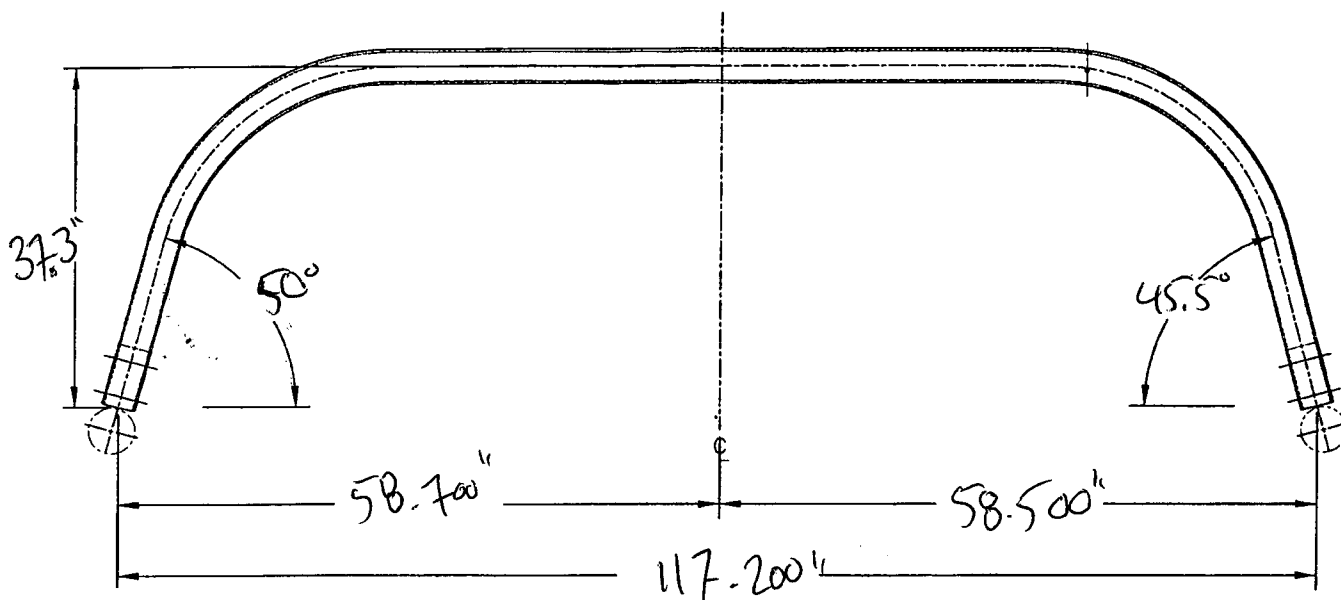
NO. 32944
WORK ORDER

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

SHOP COPY
RETURN TO
ENGINEERING

| | | | |
|--------------------------------------|--|--------------|--------------|
| DART AEROSPACE LTD | | Work Order: | 32944 |
| Description: Crosstube High-High Aft | | Part Number: | D205-596-103 |
| Inspection Dwg: D205-596-103 Rev: A | | Page 1 of 1 | |

| Required Dimension | Min | Max |
|--------------------|-------|-------|
| Height | 37.2 | 37.4 |
| 1/2 Span | 58.7 | 58.9 |
| Angle | 49 | 52 |
| Total Span | 117.4 | 117.8 |



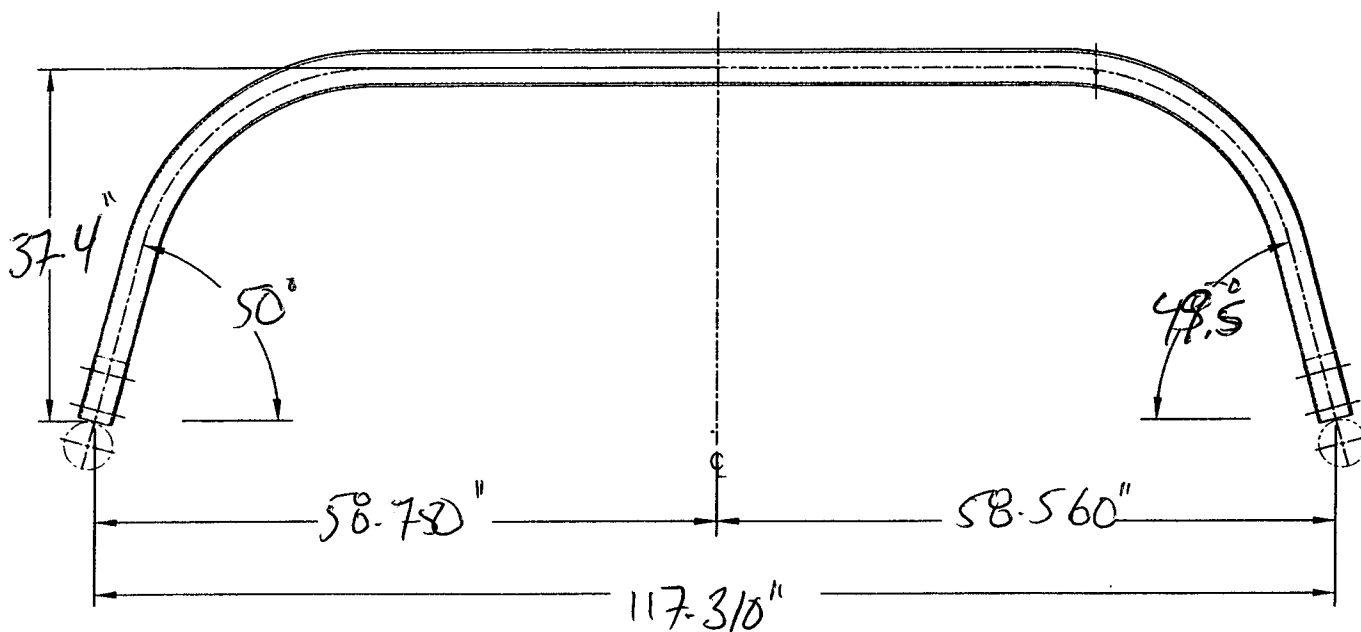
| Comments |
|----------|
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| | |
|-----------------|--|
| QC15 Inspection | |
| Date | |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------|------------|--------------------|
| A | 07.02.06 | New Issue | KJ/JM | <i>[Signature]</i> |

| | | | |
|---|---------------|---------------------|--------------|
| DART AEROSPACE LTD | | Work Order: | 32944 |
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| Required Dimension | Min | Max |
|--------------------|-------|-------|
| Height | 37.2 | 37.4 |
| 1/2 Span | 58.7 | 58.9 |
| Angle | 49 | 52 |
| Total Span | 117.4 | 117.8 |



| Comments |
|--|
| * cut height @ 37.4" AS PER E-MAIL FROM DAVID SHEPHERD |
| |
| |

| | |
|-----------------|----------|
| QC15 Inspection | EP |
| Date | 07/08/16 |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------|------------|----------|
| A | 07.02.06 | New Issue | KJ/JM | |

Jason Murdoch

From: David Shepherd [dshepherd@dartaero.com]
Sent: Thursday, August 16, 2007 3:02 PM
To: 'Jason Murdoch'
Cc: 'L Lacelle'; 'Jean-Luc Menard'
Subject: FW: w/o32944 D250-596-103
Attachments: crosstube dims 3.jpg; crosstube dims 4.jpg

D205-596-103 B32944 is acceptable.
Cut to a height of 37.4"

Daivd

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: Thursday, August 16, 2007 11:45 AM
To: davids@dartaero.com; David Shepherd
Subject: w/o32944 D250-596-103

Sorry about this mix up David here are the new Dim sheets with the correct angle on them

Thanks
Eric Downing

jmurdoch@dartaero.com
Q.C. COORDINATOR

From: Brigitte Golden [mailto:bgolden@dartaero.com]
Sent: Thursday, August 16, 2007 1:34 PM
To: 'Jason Murdoch'
Subject: crosstube dims

As requested, dear.

Sian

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.484 / Virus Database: 269.11.19/956 - Release Date: 8/16/2007 9:48 AM

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.484 / Virus Database: 269.11.19/956 - Release Date: 8/16/2007 9:48 AM

8/16/2007